

### REMARKS

The Final Office Action, mailed January 26, 2007, considered claims 1-51. Claims 4, 5, 7-10, 15, 16, 22-26, 31, 35 and 36 were rejected under 35 U.S.C. 102(b) as being anticipated by "Response to UML 2.0 Request for Information" hereinafter referred to as *Clark*. Claims 1-3, 37-39, 41, 43 and 51 were rejected under 35 U.S.C. 103(a) as being unpatentable over *Clark* in view of U.S. Patent No. 6,222,537 to Smith et al. hereinafter *Smith*, cited in the previous office action. Claims 6 was rejected under 35 U.S.C. 103(a) as being unpatentable over *Clark* in view of U.S. Patent no. 6,542,595 to Hemzal [cited in previous office action]. Claims 11-14, 20, 21, 27-30, 33 and 34 were rejected under 35 U.S.C. 103(a) as being unpatentable over *Clark* in view of U.S. Patent No. 5,958,012 to Battat et al. [hereinafter *Battat*, cited in previous office action]. Claim 17 was rejected under 35 U.S.C. 103(a) as being unpatentable over *Clark* in view of U.S. Patent No. 6,041,143 to Chui et al. [hereinafter *Chui*, cited in the previous office action]. Claims 18 and 32 were rejected under 35 U.S.C. 103(a) as being unpatentable over *Clark* in view of U.S. Patent No. 6,353,448 to Scarborough et al. [hereinafter as *Scarborough*, cited in the previous office action]. Claim 19 was rejected under 35 U.S.C 103(a) as being unpatentable over *Clark* in view of U.S. Patent No. 5,907,704 Gudmundson et al. [hereinafter *Gudmundson*, cited in the previous office action]. Claim 42 was rejected under 35 U.S.C. 103(a) as being unpatentable over *Clark* and *Smith* further in view of U.S. Patent No. 6,430,538 to Bacon et al. [hereinafter *Bacon*, cited in the previous office action]. Claims 40 and 50 were rejected under 35 U.S.C. 103(a) as being unpatentable over *Clark* and *Smith* further in view of *Hemzal* [cited in previous office action].<sup>1</sup>

By this paper, claims 1-3, 26, 39-47, and 49-51 have been cancelled and claims 4-25, 27-38 and 48 have been amended<sup>2</sup>, such that claims 1-3, 26, 39-47, and 49-51 have been cancelled and claims 4-25, 27-38 and 48 remain pending in the application.

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<sup>1</sup> Although the prior art status of the cited art is not being challenged at this time, Applicant reserves the right to challenge the prior art status of the cited art at any appropriate time, should it arise. Accordingly, any arguments and amendments made herein should not be construed as acquiescing to any prior art status of the cited art.

<sup>2</sup> Support for the amendments can be found throughout the specification, but with particularity at page 27, line 5-10, page 28, line 9-15, page 30, line 8 – page 34, line 21.

The application is generally directed to allowing notations to be separate from semantics in modeling environments. The combination of a notation and a semantic is a model element which may be used to model various items in the modeling environment. Notations are graphical representations of the model element. Semantics define the functionality of the model element within the environments. By having separated notations and semantics, model elements can be very configurable such that functionality and representation can be readily extended within the modeling environments. In particular, a semantic may be selected and one of a number of different notations graphically representing the semantic can be selected from among a number of different notations.

The semantic includes an interface which describes requirements of the semantic. For example, the semantic may require a certain number of connection points, certain animations, certain zoom functionality etc. The notation includes an interface which describes the capabilities of the notation. Paralleling the semantic example, the notation may indicate that it is capable of providing a certain number of connection points, animations, or zoom functionality.

The independent claims as now amended illustrates the separate nature of the notations and semantics as well as the functionality of the interface of the notations and semantics. In particular, claims 4 illustrates a method where the interface of a notation describing capabilities of the notation, selected from a plurality of notations is used to associate the notation to a semantic by evaluating the interface of the semantic describing requirements of the semantic. Claim 48 is a computer program product claim implementing the functionality of claim 1. Claim 37 is a system claim further illustrating the separate nature of the semantic and notation by illustrating that the semantic and notation are each stored on separate servers.

The cited portions of the art cited in the office action fail to show at least the interfaces described for the semantics and the notations and in the case of claim 37 the separate servers storing the semantics and notations. Clark notes that "a concrete syntax comprises the rules on how to put together boxes, lines etc. that make up a diagraph" and that "an abstract syntax talks in terms of classes, associations, etc that those boxes and lines represent." See Clark at 2.1.2.1. Figure 1 of Clark appears to illustrate how concrete representations can be mapped from a syntax domain to a semantics domain. See Clark at Figure 1 and "Terminology." However, Clark does not seem to teach or suggest that a notation is selected independent of a semantic and paired with the semantic based on the interfaces of the two. While Clark does seem to indicate that there

may be "many concrete representations for any particular element from either domain" (see "Terminology" at page 10), the examples shown in Clark illustrate that these concrete representations are not independent of behaviors, but rather are used to "specify general behaviours of operations" or "represent a specific trace of [a] behaviour." However, Clark is silent with respect to the interfaces used for associating notations and semantics.

Smith does not compensate for the deficiencies of Clark. While Smith does illustrate that behavioral logic and visual representations are separated (Smith at col. 7, lines 53-55), Smith accomplishes this in a fashion contrary to what is recited by the claims of the present application. For example, Smith teaches that media is associated with a given control state. Smith at col. 7, lines 18-22. Further illustrating a concrete example, Smith notes that media is mapped to a particular state. See Smith at col. 10, lines 21-31 and col. 10, lines 35-38 illustrating that images are map to states. Thus it appears that when a control is in a particular state, media that is mapped to that state is displayed. However, Smith does not disclose that the media includes an interface providing information about capabilities of the media. Thus, the media is not associated with the controls by associating capabilities of the media with requirements of the control.

Applicants would further like to point out dependent claims 6, which further illustrates these requirements by illustrating a validation that occurs by ensuring that a notation's capabilities meet a semantics' requirements. The validation cited in the present Office Action (Hemzal at col. 10, lines 1-25) shows validation of syntactic and semantic rules, but does not show the specific validation recited in the claims of the present application, which includes "validating through the notation object and semantic object interfaces that the notation object has capabilities to meet the requirements of the semantic object".

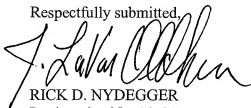
In view of the foregoing, Applicant respectfully submits that the other rejections to the claims are now moot and do not, therefore, need to be addressed individually at this time. It will be appreciated, however, that this should not be construed as Applicant acquiescing to any of the purported teachings or assertions made in the last action regarding the cited art or the pending application, including any official notice. Instead, Applicant reserves the right to challenge any of the purported teachings or assertions made in the last action at any appropriate time in the future, should the need arise. Furthermore, to the extent that the Examiner has relied on any Official Notice, explicitly or implicitly, Applicant specifically requests that the Examiner

provide references supporting the teachings officially noticed, as well as the required motivation or suggestion to combine the relied upon notice with the other art of record.

In the event that the Examiner finds remaining impediment to a prompt allowance of this application that may be clarified through a telephone interview, the Examiner is requested to contact the undersigned attorney at 801-533-9800.

Dated this 26<sup>th</sup> day of April, 2007.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "J. Lavar Oldham", is written over the typed name "RICK D. NYDEGGER".

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